I CLAIM

1. A method for providing a discontinuous radio link for user equipment in a telecommunication network in a physical radio transmission layer when receiving packets while maintaining the logical connection in higher protocol layers during a packet service mode, **characterized in that**

the user equipment enters into a discontinuous reception mode receiving either:

a) two or more slots of each radio frame, or

b) one or more frames; and

powers down its receiver circuitry for either a) the remaining slots of the radio frame or b) one or more predefined periods, signaled by the telecommunication network.

2. A method according to claim 1, **characterized in that** packet transmission starts in one out of every K radio frames.

3. A method according to claim 1, **characterized in that** the two or more slots are consecutive slots in the radio frame.

4. A method according to claim 1, **characterized in that** the two or more slots are non-consecutive slots in the radio frame.

5. A method according to claim 1, **characterized in that** the user equipment has an active period of two or more consecutive slots or idle frame(s) prior to its own reception for performing neighbor measurements and power control functions.

6. A method according to claim 5, **characterized in that** the user equipment adapts the active period depending on neighborhood conditions by increasing the active period when neighborhood conditions are unstable, and decreasing the active period when neighborhood conditions are stable.

7. A method according to claim 1, **characterized in that** the user equipment responds to a change in the status of a transport format combination indicator (TFCI) field in the two or more slots of the radio frame for determining an end of a data packet.

8. A method according to claim 7, **characterized in that** in a discontinuous reception mode the user equipment monitors a command in a transmission power control (TPC) field in the two or more slots of the radio frame and the status of the transport format combination indicator (TFCI) field in order to respond to commands from the telecommunications network.

9. A method according to claim 7, **characterized in that** the user equipment determines a start of a new packet transmission by monitoring the status of the transport format combination indicator (TFCI) field in a previous radio frame before a new packet data radio frame.

10. A method according to claim 1, **characterized in that** in the discontinuous reception mode the user equipment switches off the receiver circuitry for a part of the radio frame or one or more radio frames.

11. A method according to claim 10, **characterized in that** the radio frame includes fifteen slots, and the part of the radio frame that the user equipment switches off the circuitry in the receiver is thirteen of fifteen slots.

12. A method according to claim 1, **characterized in that** the user equipment receives higher layer signalling from a radio network controller or a base station in the telecommunications network that defines a period where the user equipment needs to perform a decoding of the radio frame or slots in order to detect if packet transmission is active.

13. A method according to claim 12, **characterized in that** the user equipment determines that the radio frame contains data targeted by decoding the radio frame using a cyclic redundancy code and having a correct cyclic redundancy code result.

14. A method according to claim 12, **characterized in that** the user equipment determines that the radio frame does not contain data targeted by decoding the radio frame using a cyclic redundancy code and having an incorrect cyclic redundancy code result; and waits an agreed period of time before decoding a subsequent radio frame.

15. A method according to claim 1, **characterized in that** in a discontinuous period the user equipment waits a fixed discontinuous period of time.

16. A method according to claim 1, **characterized in that** in a discontinuous period the user equipment waits a variable discontinuous period of time.

17. A method according to claim 16, **characterized in that** the user equipment, a radio network controller or a base station in the telecommunication network or both perform an algorithm randomizing the variable discontinuous period.

18. A method according to claim 16, **characterized in that** in a random non-receiving period the network defines the discontinuous period where the user equipment needs to perform a decoding of frame or slots in order to detect if packet transmission is active or not.

19. A method according to claim 18, **characterized in that** if the packet transmission is not active, the next active period follows after a random period of N radio frames.

20. A method according to claim 19, **characterized in that** a radio network controller or a base station in the network signals the value of N to the user equipment.

21. A method according to claim 1, **characterized in that** the user equipment concurrently enters into a discontinuous transmit mode and performs one or more closed loop power control sequences for following the fading of an uplink, a downlink or both when its transmitter is active.

22. User equipment for operating in a telecommunication network for receiving packets during a packet service mode,

characterized in that the user equipment includes a user equipment power control loop module that enters the user equipment into a discontinuous reception mode for receiving two or more slots of each radio frame with receiver circuitry and for powering down the receiver circuitry for the remaining slots of the radio frame.

23. User equipment according to claim 22, **characterized in that** the power control loop module checks for packet transmission in one out of every K radio frames.

24. User equipment according to claim 22, **characterized in that** the power control loop module checks two or more consecutive slots in the radio frame.

25. User equipment according to claim 22, **characterized in that** the power control loop module checks two or more non-consecutive slots in the radio frame.

26. A base station for operating in a telecommunication network for providing packets during a packet service mode to user equipment having receiver circuitry, **characterized in that** the base station includes a base station power control loop module that provides a signal to the user equipment to enter into a discontinuous reception mode for receiving two or more slots of each radio frame and to power down its receiver circuitry for the remaining slots of the radio frame.

27. A base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check for packet transmission in one out of every K radio frames.

28. A base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check two or more consecutive slots in the radio frame.

29. A base station according to claim 26, **characterized in that** the signal contains information for the user equipment to check two or more non-consecutive slots in the radio frame.